



The

# GARzette



The Official Newsletter of the Gwinnett Amateur Radio Society

December 2024 <http://www.gars.org/> Volume 51, Issue 12

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[www.GARS.org](http://www.GARS.org)

**Don't forget to support our  
advertisers at the back of the  
GARzette.**

**TechFest**

Gwinnett Amateur Radio Society

**GARS January Exhibition of the  
Technical aspects of Amateur Radio  
Held at the Gwinnett County Fairgrounds**

**The next TechFest is January 11, 2025**

**GARS wishes all happy Holidays and  
good QSOs for the rest of the year**



## President's Message

### From the President...



It is hard to believe that the holidays and 2025 are upon us. GARS ushered the holiday season in style, as always, with our annual holiday party. Big thanks to Geri Foust, K4GMF, and the team for a wonderful meal and all the volunteers who brought desserts; like any radio event, I don't believe anyone left hungry. It is always great to see the faces that go with the voices that you hear on the radio and make an eyeball QSO.

During a brief business meeting, Ralph Pickwick KJ4CNC, presented the club with the monetary proceeds from the recent Stone Mountain HamFest. A big thanks again to those who volunteered their time to help with the event, which allows GARS to reap the benefits of supporting our activities all year long. Additionally, Paul Kelley W4KLY presented a check for the education fund from additional silent key sales, which will be put to great use for the upcoming ARISS contact at Woodward Mill, as well as support radio activities at Paul Duke STEM school.

Our master of activities, Sandy Jackson KJ4DRO, kept everyone entertained with some festive

reindeer games and helped with our door prize drawing. Everyone was a great sport, and those who participated walked away with a variety of prizes.

The most significant part of the evening was announcing our latest Ham of the Year (HOTY). Voted on by the officers, this year's recipient was Paul Kelley W4KLY. Paul has supported the club and amateur radio community for a long time, and this honor is well deserved, so please join me in congratulating him on the well-deserved recognition. Look elsewhere in the newsletter for more details on the accomplishments and merits considered in naming Paul Ham of the Year.

Looking forward – another year of GARS activities upon us. January will start with one of our big events of the year – TechFest, followed up shortly by Winter Field Day. Ed Henderson W4BSR and the entire TechFest committee have been hard at work to make sure we have a great event this year. I recently heard that all our forums are now planned so keep an eye on the website for those details. I'm especially looking forward to the high altitude balloon launch by Jack McElroy KM4ZIA.

Until then, happy holidays

73,

**Kevin W4KIB**  
Club President



## GARS Repeaters and Other Communications

<u>2 Meter Repeaters</u>	<u>6 Meter Repeater</u>	6M	Currently down
147.075(+) MHz Tone 82.5	53.110 (-1 MHz) No Tone	147.075	Operational in Snellville
147.255(+) MHz Tone 107.2	(Offline for Maintenance)	147.255	Operational in Snellville
<u>1.25 Meter Repeater</u>	<b>Other Resources:</b>	224.580	Operational in Grayson
224.580(-) MHz Tone 100.0, 1.6 MHz Offset	<u>APRS</u>	442.100	Operational at Goshen Springs Rd, Norcross
<u>70 Cm Repeaters</u>	144.390 -- 1200 Baud W4GR	442.325	Operational in Buford
444.525(+) MHz Tone 82.5	<u>D-STAR</u> (WD4STR)	444.525	Operational in Snellville
442.100(+) MHz Tone 100	145.060 + (1.4 MHz)		Link remote receivers being added
442.325(+) MHz Tone 100	440.550 + (5 MHz)		

### Notable Web Links

Ham Radio Glossary: <https://noji.com/hamradio/glossary.php> a very comprehensive listing provided by Noji Ratzlaff KNØJI. On his site there is also a lot of information about getting started in ham radio.

### Need Help – Let GARS Elmers answer your questions

Send an email to [elmers@gars.org](mailto:elmers@gars.org) with the subject listing the area (like Antennas, Repeaters, Digital, DMR etc.) of your query to get to GARS Elmer volunteers.

## About the GARzette

The GARzette is the official monthly newsletter of the Gwinnett Amateur Radio Society, serving its members and other persons interested in the advancement of the Amateur Radio art.

Original articles, art, and photos are invited and encouraged. Previously copyrighted submissions cannot be accepted for reprinting unless permission from the appropriate publisher is provided in writing along with the information being submitted. If reprints are from publications allowing their unrestricted use, please include a copy of the printed permission contained in the publication.

If possible, bring your articles to the monthly meeting in Microsoft Word or rich text (.rtf) or text or HTML format or by e-mail to [editor@gars.org](mailto:editor@gars.org). Artwork can be accepted in most any graphics format and can be submitted via e-mail to the same address. Alternate means of submittal can be arranged when necessary.

In keeping with the Amateur Radio spirit, permission is hereby granted for the reproduction of The GARzette articles by other Amateur Radio club newsletters provided that proper credit is given to the individual author and *The GARzette*.

*The GARzette* is published each month with the assistance of Karen KI4HPP and Kyle W4KDA who print copies for distribution at meetings, etc. and Dave Bruse, W4DTR, who distributes the newsletter electronically.

Deadline for submissions is the 28th of each month for inclusion in the following month's issue.

For additional information view our Website at: <http://www.gars.org> [PS— Articles to publish in the GARzette, either written by GARS members or published elsewhere, are always welcome. —Ed.]

Newsletter Email: [editor@gars.org](mailto:editor@gars.org) Editor: Bob Hoffmann, K4CQO

### GARS Personalized Mugs for sale – Bits Print and Press



Jolie  
Dellaneve-  
Brown,  
KO4AHI



<mailto:bitsprintandpress@gmail.com>



## GARS Meetings & Workshops

GARS Meetings and Workshops are held in-person at the EAA 690 Hangar, 690 Airport Rd, Lawrenceville, GA 30046.

Meetings and Workshops are OPEN to all, feel free to share your invite with others.

Zoom login info will be posted to <http://www.gars.org> prior to the meeting.

### GARS Meetings Schedule (second Tuesday @ 7:00 PM): (these are the presentations)

- December 7 – **GARS Holiday Party** and GARS Ham of the Year Announcement
- January 14 – High Altitude Balloons – Jack McElroy KM4ZIA, [note, the balloon is being launched at Techfest Jan. 11, 2025]
- February 11 - TBD
- March 11 - TBD

### Workshop Schedule (third Tuesday @ 7:00 PM): (these are the Hands-on Workshops)

- December – No workshop in December
- January 21 – High Altitude Balloons – Jack McElroy KM4ZIA
- February 18 - TBD
- March 18 - TBD

### GARS Holiday Celebration – December 7, 2024

GARS celebrated its annual Holiday party with food, fun & games along with the awarding of the GARS Ham of the Year Award.

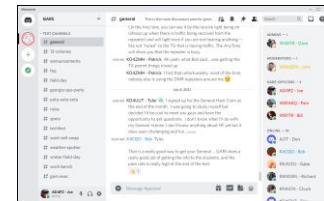


Enjoy December with your family and friends – and spend some time on the air waves.

GARS would like to thank Steve Back, WB2OGY for his Modulation presentation.



Don't forget about our Discord utility for GARS announcements, news, activity spotting and more. See <http://www.gars.org> top of the home page. This is a sample of Discord. →



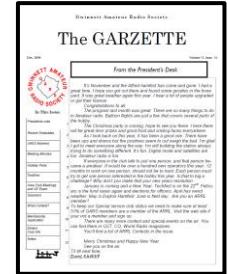


# GARS Happenings

## **20 Years ago in the December 2004 GARzette:**

- There is mention of balloon launches with the just passed Stone Mountain HamFest – something GARS TechFest is doing next month
  - GARS had its Holiday party
  - GARS had a successful Technician HamCram and planning on a General HamCram in the next few months

You can always browse the GARzette archive at <http://www.gars.org/newsletters>. 73, Bob, K4CQO,  
GARzette Editor



## Health and Wellbeing – Sandy Jackson, KJ4DRO

Look for this resource on [Email](https://gars.org/contact/) (<https://gars.org/contact/>) and use it as a means to convey information about a GARS family member or Silent Key notification.

# Net Managers Corner

## **Monday Night 2 Meter “Want, Swap, Sell, and Information Net”**

# **GARS NEEDS MEMBERS TO SERVE AS NET CONTROL STATIONS!**

GARS is a great Amateur Radio service club with the membership and awards to prove it. Our club is very busy and active, and we use the Monday night net to get timely information out to our members. Weekly participation is needed to make our net function well. There is only a small group of very dedicated people who make the net happen each week, and we need more members to volunteer to serve as Net Control Stations (NCS) on a rotating basis.

Out of almost 300 members, there are only five operators who serve as the NCS for the GARS net every Monday night. In no particular order, they are:

Ray – N4GYN      David – KA4KKF      Kevin – W4KIB      Bill - WD4AMC      Chuck – KK4TKJ

As GARS Net Manager (Chuck KK4TKJ), I would like to have more volunteers to fill NCS positions. I do plan and post the schedule months in advance. Any conditions will be accommodated that you as a rotating NCS need to place on the scheduling of your duties. If your plans change, I can make adjustments for the schedule to work, and I will make those changes happen as soon as I am notified of a problem. As Net Manager, I also send out reminders each week to let the NCS scheduled know he or she is NCS for the next Monday night net. In short, serving as a rotating NCS is a small duty but a great contribution to the club. The "Want, Swap, Sell Information Net" begins promptly at 19:30 every Monday night and runs about 30 minutes. As a scheduled NCS, you will request the assistance of a volunteer alternate NCS each time you have Net Control. Your simple duties will be to tune in to the GARS repeater, read the script, take a few notes and forward the information to me for record keeping.

Please lend a hand and contact (Chuck) via Email ([Click Here to Email our Net Manager](#)) to help support the effort that makes GARS the great club that it is. See you on the Nets!

## Fridays on 440 Net

The "**Fridays on 440 Net**" has been held every 2<sup>nd</sup> and 4<sup>th</sup> Friday of the month. During its time, it has provided the gars 440 repeater traffic and also made sure the members who joined the net were aware of how easy it was to connect to and also the excellent audio quality of this repeater.

GARS wishes to thank Alex for organizing and running this net and with this, the net has been discontinued.

Contact Alex Kowalchuk, AK4AM or use our Net contact facility ([Click Here to Email our Net Manager](#)).

## Gars Holiday Party and HoTH Presentation



### Ham of The Year Presentation

Paul Kelley, W4KLY, was chosen as our 2024 GARS Ham of the Year for the following dedications and merits he has given to Gwinnett Amateur Radio Society and the broader radio community.

- Long-term GARS member
- CW captain at Field Day multiple times and one of the key CW operators in the club
- Actively participates and volunteers as part of the education committee to support GARS with our school activities
- Supports GARS at numerous volunteer events, including the Memorial Day parade and Stone Mountain HamFest
- Recently supported Larry (AB4NX) and Karen Whited (AB4NW) with their move to FL, including removing antennas and tower
- Spearheaded the estate sale of Dave Adanich's (K8WDJ) equipment, which he graciously donated to the GARS education fund

Paul is a great example of the service-oriented spirit of Amateur Radio, and the Ham of the Year award is well deserved.

Kevin Igarashi-Ball, W4KIB



## Upcoming GARS TechFest

### Advanced Technology Using Amateur Radio

By Edwin Henderson W4BSR

Have you heard others talking about WSPR, D-STAR, C4FM, DMR or APRS but haven't yet tried them out? Perhaps you read about AREDN networks, and would like to see one demonstrated and explained. Amateur Radio is full of technology beyond grabbing a mic and squeezing the key. One of the greatest things about getting licensed in Amateur Radio is the freedom to experiment in communications, electronics, emergency preparedness, and more. While all of these acronyms may seem to blur together, there are Hams who enjoy experimenting with these modes and technologies and they love to tell others about them.

There is one place on January 11<sup>th</sup>, where all of the technologies available to Hams will be displayed, discussed, taught, and demonstrated. The **Gwinnett Amateur Radio Society's TechFest** is an exposition of technology. If you are anywhere in the area around North Georgia, make your way to the Gwinnett Fairgrounds for this annual event. There is no fee to enter, no fee to park, other events like VE Testing, electronic projects for youth, and a chili cook-off; and they'll even feed you lunch for free!

If your radio club or organization has a special interest which members enjoy together, be it modes of operation, outings, SOTA, POTA, EMCOMM, DX'ing, or anything you'd like to share, contact [GARS](#) and reserve a table to display and share these interests with others. Table display spaces are free as well.

The first event of the morning will be a forum at 9:00 AM on **HAB's or High-Altitude Balloons**, by a young man who is a High School Junior, a ham radio enthusiast, and who comes from a family of Hams. Jack McElroy has been ballooning since he was a youngster, and has taught others about it at ham fests, YOTA events, and more. Jack will lead a forum, then take everyone outside for a launch. Jack's Balloon will carry a payload consisting of a transmitter powered by solar cells which should reach a stable altitude and follow the wind stream out over the Atlantic Ocean, then toward Europe and beyond. After the launch there will be live balloon tracking throughout the day using packet radio. Location, weather and other information will be shared via WSPR and APRS as the balloon travels.

TechFest will have several other forums going until 3:00 PM, VE-led amateur radio licensing exams 9:00-11:00 AM, hourly door prizes, a great radio equipment raffle, and lots to see and learn. It's a great place to be on a cold January day, so go to the website <http://www.techfest.info/> for more information, put it on your calendar and join your friends in the Gwinnett Fairgrounds Expo Hall!

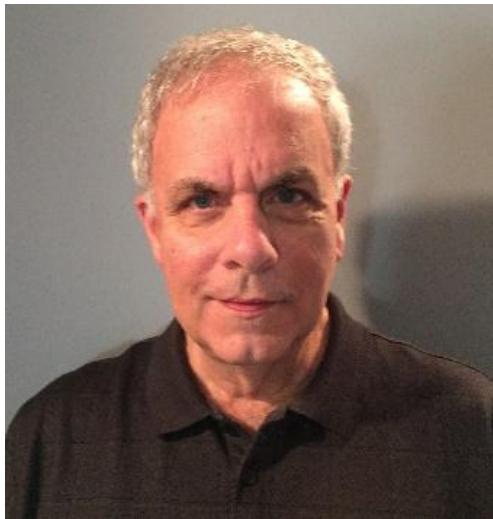


January 11, 2025  
Gwinnett Fairgrounds Expo Hall

## Drake Amplifiers - Features - L7 and L75

### Vintage Amateur Radio

de Bill Shadid, W9MXQ



Following last month's article about R. L. Drake Company's entry into the Linear Amplifier market, we continue on with two additional models. These were the last amplifiers produced by Drake. In the late 1970's, Drake had moved from basically vacuum tube receivers and transceivers to solid state designs. While Drake never did make a solid-state Linear Amplifier, in 1979 they accommodated their recently introduced solid state TR7 Transceiver with the introduction of the matching 160-meter through 15-meter L7 Linear Amplifier. (The L7 could be field modified to operate on Amateur Radio 12-meter and 10-meter bands.

While keeping some basic performance parameters and tube selection, Drake updated the design of the L7 as compared to its predecessor, the model L-4B.



**Drake L7 Linear Amplifier**

**W9MXQ**

By the time of the arrival of the TR7 Transceiver and the L7 Linear Amplifier, Drake had established itself as a major player in the amateur radio market.

With the L7, Drake answered the growing demand for equipment that supported the popular 160-meter band. Essentially, the L7 was a 1.8 to 30 MHz general coverage amplifier which made it well equipped to perform well on the new 17-meter and 12-meter bands. The L7, however, did come from the factory with its circuitry inhibited from 24 to 30 MHz. This was in keeping with the Federal Communications Commission's ruling that amplifiers marketed in the United States could not function on the 11-meter Citizens Band (at 27 MHz). Of course, a licensed Amateur Radio operator was free to modify such amplifiers for operation on the 12-meter and 10-meter bands – and Drake did offer instructions to do so with proper proof of being licensed.

The design of the Drake L7 Linear Amplifier was meant to match the Drake products of the day:



**Drake TR7 HF Transceiver**

W9MXQ



**Drake TR7A HF Transceiver**

W9MXQ

The Drake L7 Linear Amplifier had the following specifications<sup>1</sup>:

- Two Eimac 3-500z or Amperex 8802 Triode Tubes
- 2000 Watts PEP Input SSB or 1000 Watts CW / RTTY
- Linear AM input power to be held to 500 watts (in SSB Mode)
- 160-15 Meters (Continuous coverage from 1.8 to 24 MHz)
  - 24 to 30 MHz coverage could be added in a field modification
- Separate L7-PS Power Supply (see picture below)



**L7-PS HV Power Supply Views (Front and Back)**  
**(Physically, the late L4-PS and the L7-PS Power Supplies are identical)**

W9MXQ

On the rear panel of the L7 are connectors for feeding high voltage (through a Millen High Voltage Connector) and control interface (through a large, 8-pin, Jones Connector) to the separate L7-PS HV Power Supply. The interface cables and main AC feed cables are hard wired to the L7-PS. The transformer providing filament voltage for the final amplifier tubes, the meter lamps, status lamps, and the voltage for the transmit/receive control relay was inside the RF Cabinet with primary voltage fed via the control interface cable.

The L7 and its predecessor L-4B had a quite different appearance. Look at the two amplifiers, side by side:





## Front Panel Layout – L7 at the Left – L-4B at the Right Functions are the same – but Layout is different – see text below for details.

W9MXQ

W9MXQ

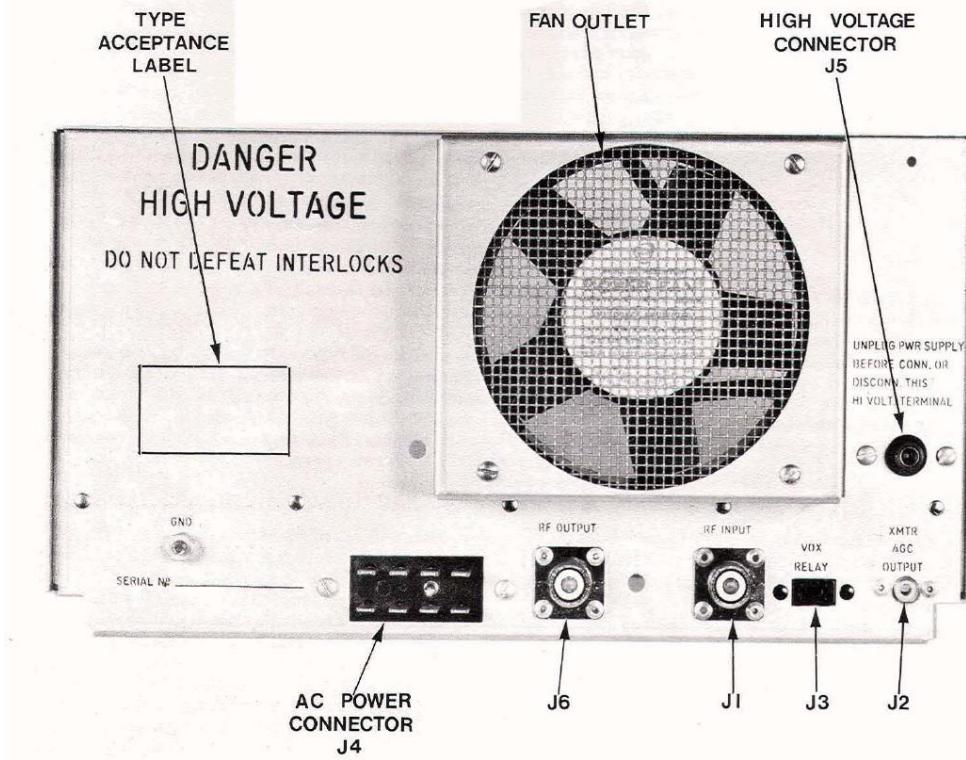
Looking at the above pictures, note that the two different meters have the same purpose. The Ammeter is on the right on the L7 and on the top on the L-4B. The same functions are handled by the multimeter (left on the L7 and on the bottom on the L-4B). Those functions are:

- Grid Current
- Plate Voltage
- Forward Power (3,000 watts)
- Reflected Power (300 watts)
- Forward Power (300 watts)

These are handled by the black pushbuttons on the L7 and a rotary switch on the L-4B. Note the ALC level knob just above the Power and Mode Rocker Switches on the L7 and on the knob to the right of the lower meter on the L-4B. The Standby (SDBY) switch on the L7 is the red button to the right of the row of black buttons on the L7. That same function was handled with a push-pull switch on the shaft of the ALC level knob on the L-4B. Function and status on the L7 are shown by lamp indicators (to the right of the plate ammeter). Also, the illuminated blue color meters on L7 are nearly hidden with power is removed from the amplifier.

The rear panel connections for input and output allowed the Drake L7 HF Linear Amplifier to easily accommodate previous and current Drake (and other brand) equipment of the day:

### Rear View – Drake L7 Linear Amplifier



See connection descriptions in the text, below.

From the Drake L7 Operating Manual – R. L. Drake Company

The connection to the remote L7-PS Power Supply were via a cable with two connectors at the amplifier end – one to the heavy-duty AC Power Connector (J4) and the other to the High Voltage positive voltage



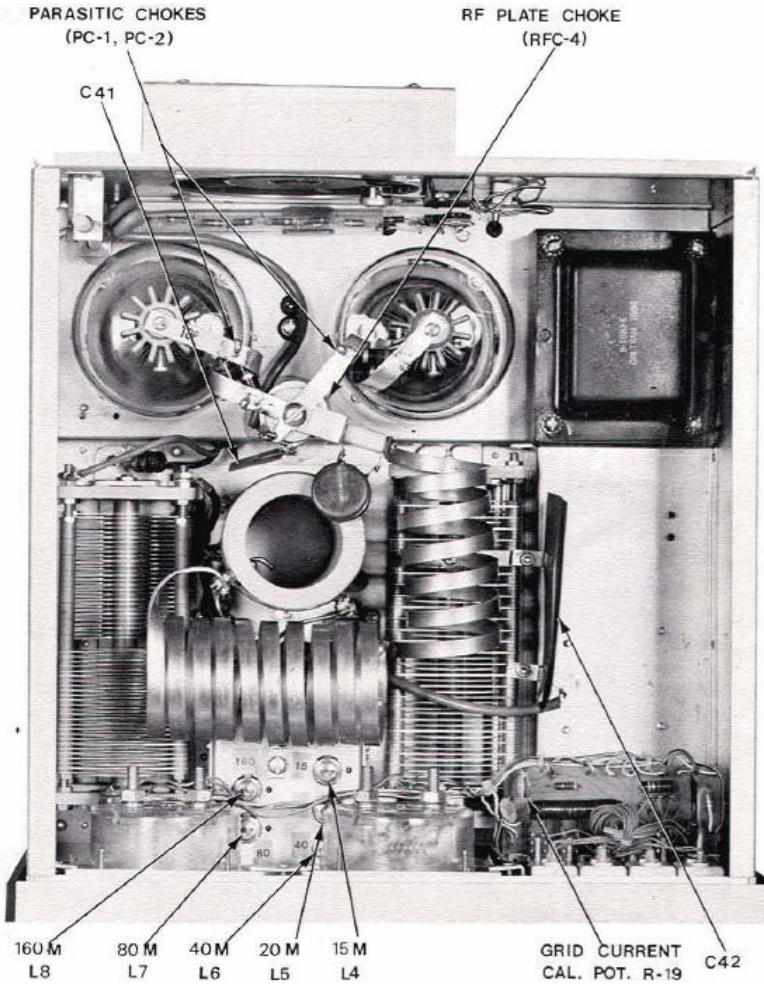
line to the Millen High Voltage Connector (J5). These two lines actually were one cable from the L7-PS that broke into two lines at the L7 Amplifier end. BEWARE!! That cable contains voltages at, or exceeding, 3,000 volts DC.

After a short while in production the connector at the VOX Relay (J3) became a phono jack and it moved away from the two pin (crystal socket) connector traditionally used in earlier Drake Transmitters and Transceivers. The VOX Relay connection requires current and voltages too high for most modern transceivers. Users should modify their amplifier accordingly or use an external switching interface<sup>3</sup>.

RF input from the Transceiver or Transmitter is connected via the RF Input connector (J1). The drive provided should not exceed 100 watts or damage to the input circuits or tubes can result – not to mention distortion in the radiated output. Output to the antenna is via the RF Output connector (J6). Automatic Level Control (ALC) voltage from the Transceiver or Transmitter is connected to the XMTR ALC Output Connector (J2).

The following are some internal views of the Drake L7 Linear Amplifier:

### Inside Top View – Drake L7 Linear Amplifier – Front Panel at Bottom of Picture

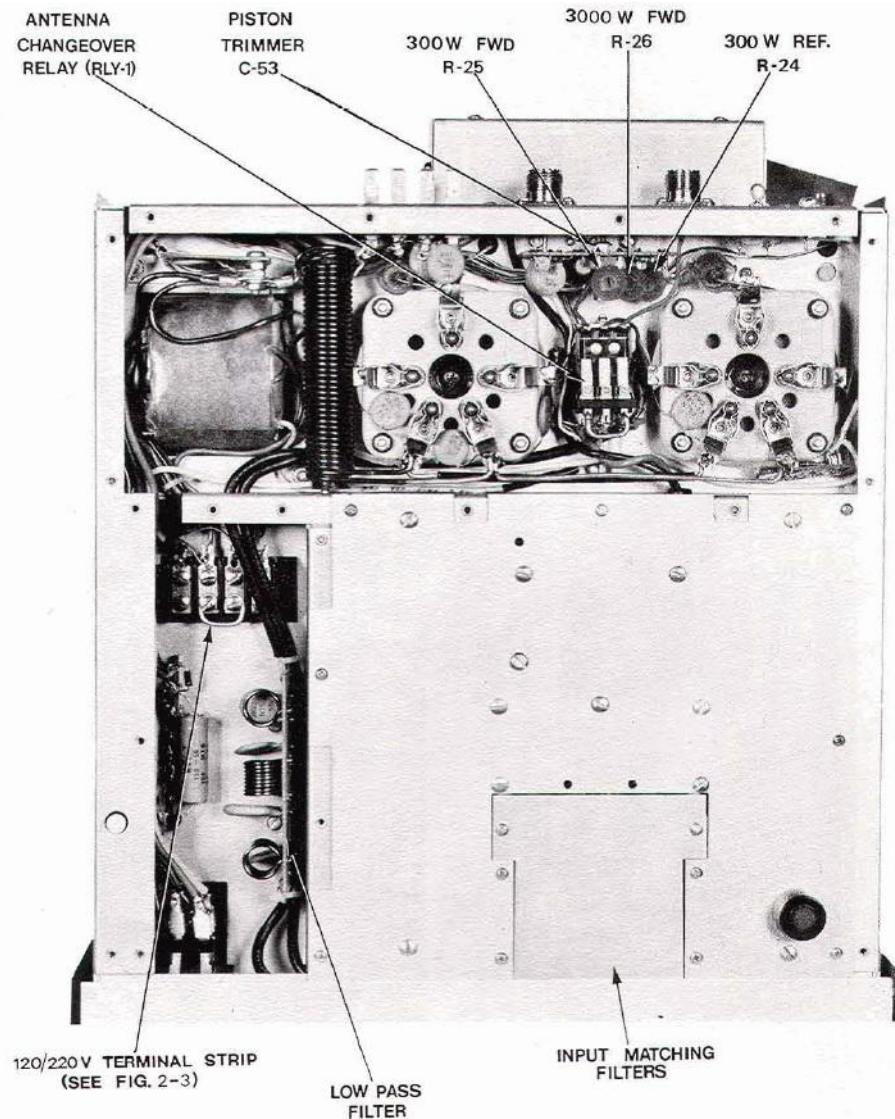


The meters are at the center and left of the Front Panel – with the indicator lamp array visible to the right. Just behind the meters are the tuned input coils with the three sections of the tank coil visible behind that. The Plate Tune Capacitor is to the right of center and the Load Capacitor is along the left side. Rear left are the two 3-500z triode amplifier tubes cooled by the horizontal fan at the very rear. To the right rear is the filament/control voltage transformer.

**From the Drake L7 Operating Manual – R. L. Drake Company**



## Inside Bottom View – Drake L7 Linear Amplifier – Front Panel at Bottom of Picture



Again, the bottom of the picture is the front panel. The tubes are at the top center and right. The filament/control voltage transformer is to the left of the tubes. You can see the filament choke between the tubes and the transformer. Toward the front from the transformer, you can see the terminal strip for 120/240 strapping of just that transformer. Called out is the LOW PASS FILTER – covered later in the text of this article. The INPUT MATCHING FILTERS removable panel covers the input matching filter components. The ANTENNA CHANGEOVER RELAY (RLY-1) is between the tube sockets. The coaxial connectors for input and output are shown at the top right on the back panel. In that same area you can see the housing for the cooling fan.

### From the Drake L7 Operating Manual – R. L. Drake Company

The Drake L7 came in two forms that I can identify. Early models included a rather difficult to access and modify in-line filter to inhibit operation above 24 MHz. This filter had its own circuit board with the input RF signal fed the circuit on its way to the tuned input coils. Later TR7 models included a by-pass circuit trace on the filter board so that conversion of the amplifier to include the 12-meter and 10-meter bands was somewhat easier to accomplish in the field.

Relatively late in the production running of the TR7 HF Transceiver and the L7 Linear Amplifier, Drake began a product line addition of a lower cost HF Transceiver, the Drake model TR5. The TR5 had a completely different conversion scheme and owes its design heritage more to the former TR-4 series Transceivers than the TR7<sup>2</sup>.



To support the product expansion of the TR7 HF Transceiver, Drake began to release accessories with model numbers ending in the number "75," to show the relationship to both lines. One of those was the L75 HF Linear Amplifier. Shown below is the L75 next to the matching TR5:



**Front Panel Layout – L75 at the Left – matching TR5 at the Right**

WB4HFN

W9MXQ

The Drake L75 Linear Amplifier had the following specifications<sup>1</sup>:

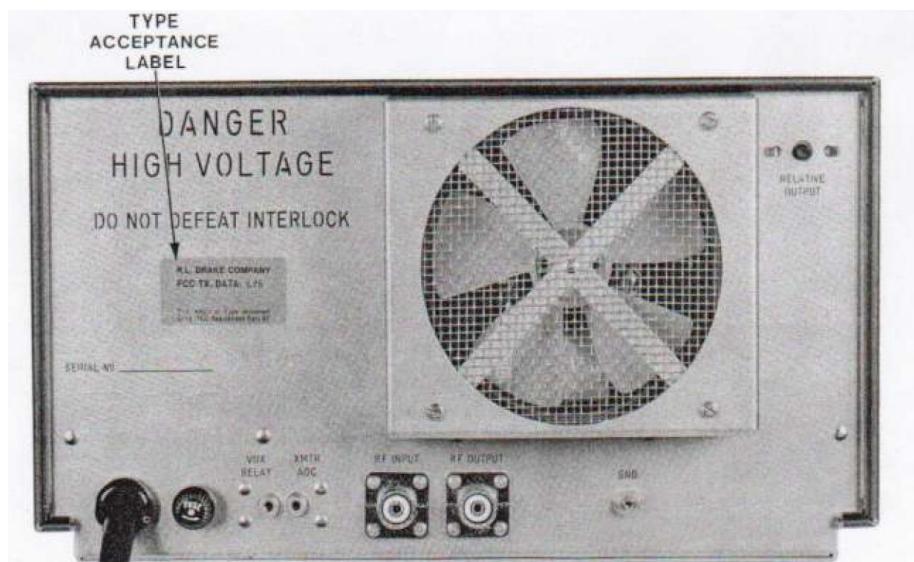
- A single Eimac 3-500Z or Amperex 8802 Triode Tube
- RF power was specified as:
  - 1200 Watts PEP Input SSB (Continuous Duty)
  - 1000 Watts CW (50% Duty Cycle)
- 160-15 Meters (Continuous coverage from 1.8 to 24 MHz)
- Internal 120/240 VAC Power Supply – no separate power supply

Metering on the single meter L75 is less convenient than on the dual meter equipped L7. Metering ranges on the L75 (switched via push buttons as on the L7) are as follows:

- Plate Voltage
- Grid Current
- Plate Current
- Relative Output

The rear panel connections for input and output allowed the Drake L7 HF Linear Amplifier to easily accommodate previous and current Drake (and other brand) equipment:

**Rear View – Drake L75 Linear Amplifier**



**See connection descriptions in the text, below.**

**From the Drake L75 Operating Manual – R. L. Drake Company**



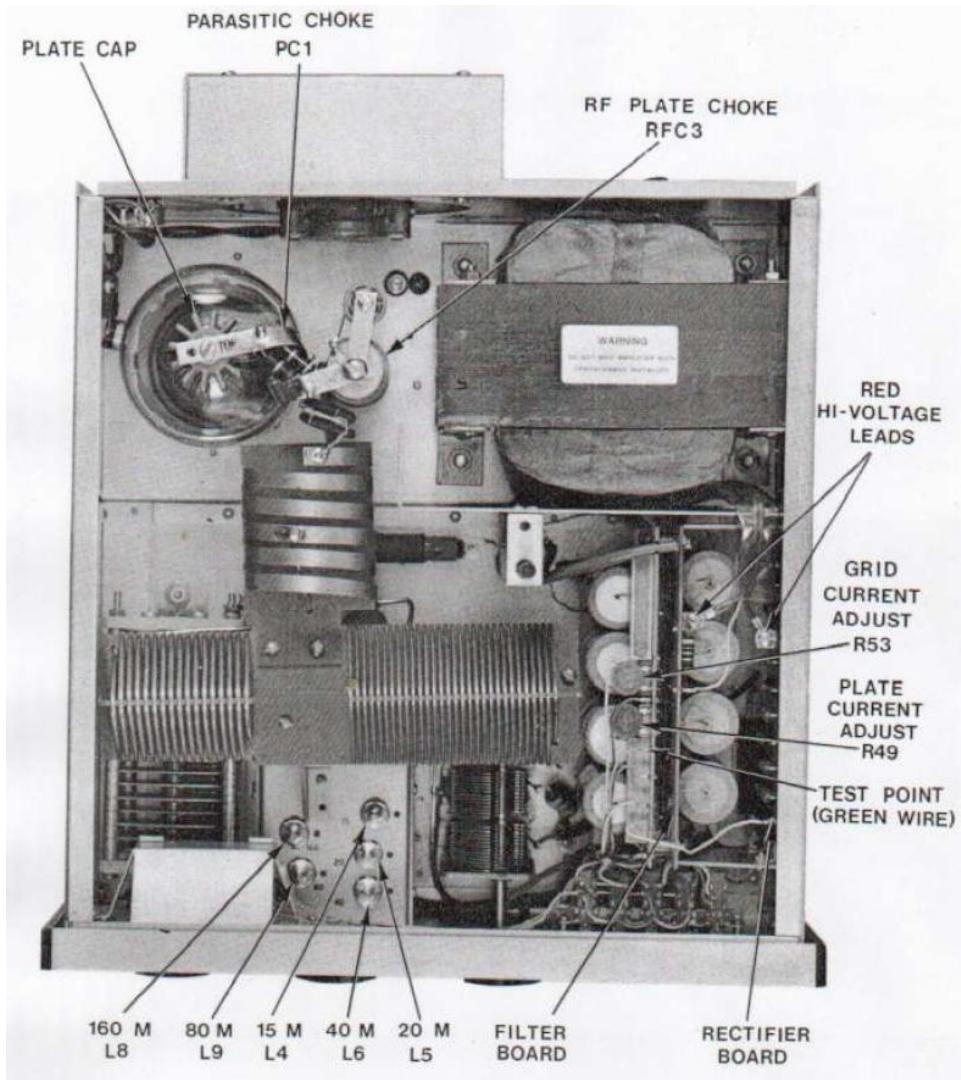
Unlike the L7 Linear Amplifier, the L75 includes its power supply within the single cabinet. So, the dangers and necessary cautions of running high voltage from one cabinet to another is eliminated.

The VOX RELAY is the PTT Line from the Transceiver or Transmitter driving the L75. As in the L7, the connection requires current and voltages too high for most modern transceivers. Users should modify their amplifier accordingly or use an external switching interface<sup>3</sup>.

Also, as with the L7 Linear Amplifier, the drive from the Transceiver or Transmitter is connected via the RF INPUT connector. The drive provided should not exceed 100 watts or damage to the input circuits or tubes can result – not to mention distortion in the radiated output. Output to the antenna is via the RF OUTPUT connector. Automatic Level Control (ALC) voltage from the Transceiver or Transmitter is connected to the XMTR ALC Output Connector.

The following are some internal views of the Drake L75 Linear Amplifier:

#### Inside Top View – Drake L75 Linear Amplifier – Front Panel at Bottom of Picture

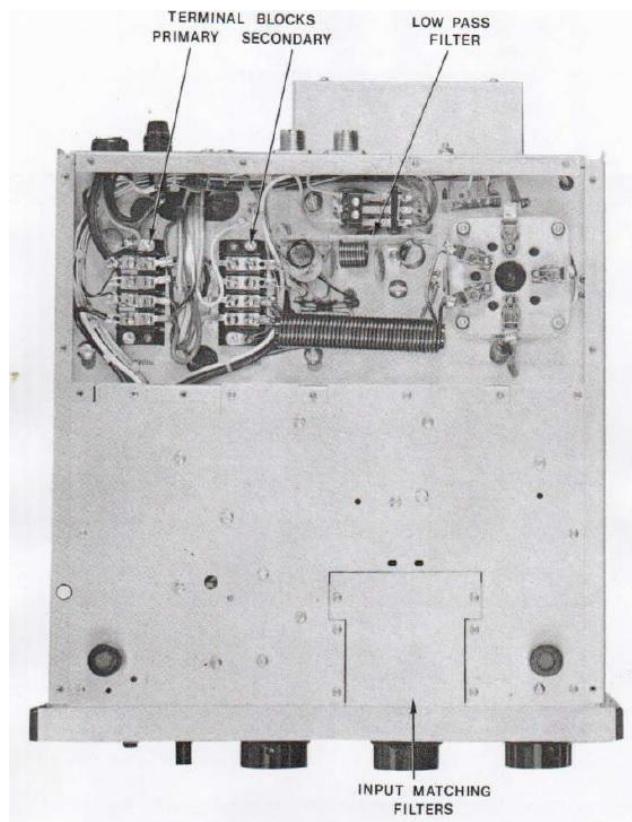


The meter is at the left, behind the front panel. To the right of the meter are the tuned input coils. The Plate Tune Capacitor is visible to the left, below the meter and the Load Capacitor is in the center, near the front panel. The indicator lamps are to the right of the Load Capacitor. Behind the lamps are the power supply components. Rear left is the 3-500Z triode amplifier tube cooled by the horizontal fan at the very rear. Power transformer is right rear.

From the Drake L75 Operating Manual – R. L. Drake Company



## Inside Bottom View – Drake L75 Linear Amplifier – Front Panel at Bottom



Again, the bottom of the picture is the front panel. The tube is at the top right. The power transformer connections are to the left of the tubes, along with the filament choke. The INPUT MATCHING FILTERS removable panel covers the input matching filter components. The ANTENNA CHANGEOVER RELAY (RLY-1) is between the tube sockets. The coaxial connectors for input and output are shown at the top right on the back panel. In that same area you can see the housing for the cooling fan.

### From the Drake L75 Operating Manual – R. L. Drake Company

Time is the best judge of success for amplifiers such as the Drake L7 and L75. To this day these amplifiers are sought after products. The L75 is extremely hard to find on the used market. The higher volume L7 is hardly better in that respect but are occasionally available. Both command more today to buy than when they were new.

I appreciate that you read my articles. Remember that I am open to questions and comments anytime at my email address, [W9MXQ@TWC.com](mailto:W9MXQ@TWC.com).

A special note of thanks to my proofreader, Bob Bailey, W9DYQ. Bob is a lot more than a proofreader as he nearly always adds commentary that makes it into the article.

### Credits and Comments:

<sup>1</sup> Product specifications for the Drake L7 and L75 models shown come from their respective Instruction Manuals – all of which exist in my files. Most Drake manuals are available on line for downloading. I download Drake manuals from Ron Baker, WB4HFN, at:

<http://www.wb4hfn.com/DRAKE/DrakeManuals.htm>.

<sup>2</sup> The TR5 HF Transceiver was the subject of a previous article.

<sup>3</sup> Reference the Ameritron ARB-704 Interface at: <https://mfjenterprises.com/search?q=ARB-704>. Not shown here are other ways to mitigate the high voltage and current switching inside the amplifier. Contact me for further details at [W9MXQ@TWC.com](mailto:W9MXQ@TWC.com) for details.



## GARS Membership

### New Members in November

Scott Champeau ( )  
Benjamin Oakes (KQ4WJW)  
Donald Seder (KQ4WOW)  
Joseph Tollison (KQ4YBT)  
Gaylynn Tollison  
Robert Wojciechowski (W0JO)

### New Members: 6

**Total Members as of  
December 1, 2024**  
**342**

Join GARS members for our:

- weekly lunch bunch at 11:30 AM most Fridays
- weekly breakfast gathering at 8:00 AM most Saturdays

Friday weekly gatherings are held at the Chilli's at:

947 Lawrenceville Suwanee Rd  
Lawrenceville, GA 30043

Saturday weekly gatherings are held at the Cracker Barrel at:

75 Celebration Dr  
Suwanee, GA 30024



### Birthdays in December

David Adcock (KA4KKF)  
Steve Back (WB2OGY)  
Joe Biddle (AD4PZ)  
Mom Carreras  
Scott Champeau ( )  
Jackson Chauvin (KN4WBJ)  
Jonathan Dickenson (KE7PQL)  
Paul England (KA4PQL)  
Barry Greene (KM4RVY)  
Lin Holcomb (NI4Y)  
Adrienne Holcomb (W4FHL)  
Tyler Jensen (WB4TLJ)  
David Johnston (KM4UVI)  
Margier Langston  
John Longo (W5BMW)  
Mitch Matteau (N0DIM)  
Chuck McCord (KK4TKJ)  
Pam Meridy (WB1AKQ)  
Alan Murray (WH7Q)  
Benjamin Oakes (KQ4WJW)  
Jack Perry (K6JLP)  
Ralph Pickwick (KJ4CNC)  
Zachary Pratt (KO4NZB)  
Grace Roberts  
Jere Sandidge (K4FUM)  
Norman Schklar (WA4ZXV)  
Dave Slotter (W3DJS)  
Susan Swiderski (AF4FO)  
Amy Woodrick (KE4IKF)

## GARS MEMBERSHIP

Your current GARS membership status is shown in the monthly newsletter e-mail towards the bottom of the message. To become a GARS member, or to renew your GARS membership, please visit our website – [www.gars.org/gars/membership/](http://www.gars.org/gars/membership/). To make changes to your GARS membership (moved, new e-mail address, new phone number, etc.), please contact the Membership Chair at [Email](mailto:Email) (<https://gars.org/contact/>) with any changes to your Membership information.

**Membership Chair:** Karen Albritton, KI4HPP

**Committee Members:** Dave Bruse, W4DTR

### ARRL MEMBERSHIP

To update your ARRL membership information, please visit their website - <http://www.arrl.org>.

### MAINTAIN YOUR LICENSE

You can update your Amateur Radio license information with the FCC at their website for free - <https://www.fcc.gov/wireless/universal-licensing-system>. License renewal is subject to the \$35 FCC fee.



## Donating to GARS

Your GARS donation can be used for a certain purpose by donating to one of these funds:

- GARS SK Memorial Fund for Education (to remember and honor Silent Keys);
- GARS Scholarship Fund (Administered by the ARRL for awarding scholarships);
- GARS General Fund (any club purpose).

GARS has joined these rewards programs (a portion of every purchase you make through these merchants may be donated to GARS):

- Kroger Community Rewards program.

For more information on how to sign up for these rewards programs, or to donate to GARS, visit

<http://gars.org/gars/donations-to-the-club>

## GARS on Social Media



Discord Request:

<http://gars.org/discord>



Groups.io:

<http://gars.org/groups.io>



Visit GARS on Facebook:

<http://gars.org/facebook>



Follow GARS on X:

[https://x.com/GARS\\_Hams](https://x.com/GARS_Hams)



Broadcast Yourself™

Join GARS on YouTube:

<http://gars.org/youtube>

## GARS Mail Address:

**GARS**  
P.O. Box 492531  
Lawrenceville, GA 30049

## Officers



Kevin Igarashi-Ball, President W4KIB



Alex Kowalchuk, Vice President AK4AM



Drew White, Secretary KQ4NUQ



Glen Wendt, Treasurer W3WWT



Kevin Scott, Program Manager K4GTR

## Managers and Committee Chairs



Karen Albritton, Membership Chair KI4HPP



Dave Bruse, VE Team Leader W4DTR



David Adcock, Webmaster KA4KKF



Ralph Pickwick, Education Chair KJ4CNC



Earl Whatley, Apparel Manager AF4FG



Bob Hoffmann, GARzette Editor K4CQO



Eddie Foust, Repeater Chair WD4JEM



Mike Weathers, WAS / DXCC QSL Card Checker and Historian ND4V



Chuck McCord, Net Manager KK4TKJ



Steve Back, Technical / RFI Advisor WB2OGY



Dallas Mellichamp, Workshop Leader N4DDM



Sandy Jackson, Health and Wellbeing KJ4DRO



Kevin Igarashi-Ball, Multimedia Chair W4KIB



Dallas Mellichamp, Georgia QSO Chair N4DDM



Neil Derryberry, Elmer Manager WD4NET



Edwin Henderson, TechFest Chair W4BSR



Open Winter Field Day Chair, Field Day Chair

## Directors and Trustees



Joe Biddle, AD4PZ



Kyle Albritton, W4KDA



John Davis, WB4QDX



Bill Cherepy, WB4WTN W4GR Trustee



## GARS Meeting Minutes

### GARS – MEETING 11/12/2024

- President Kevin Igarashi-Ball (W4KIB) opened the meeting at 7:00 p.m. and closed the meeting at approximately 8:20 p.m.
- New hams and visitors: Kevin (W4KIB)
  - Joseph – New ham, call sign KQ4YBT
  - Bob – New ham, pending call sign
  - Scott – New ham, pending call sign
  - Michael, Mario, Tanavia are interested in becoming a ham
- Acknowledgment of several November birthdays within the group.
- Treasurer Report: Glen (W3WWT)
- Membership (W4KIB): Currently there are 353 members
- Education: Ralph (KJ4CNC)
  - ARISS contact at Woodward Mill in 2025
  - Thanks to all those GARS members who attended the HamJam. GARS was the largest club in attendance and won a model rocket kit and soldering kit which will be donated to the education committee for use
- Silent Key Donation: Paul Kelley W4KLY - Dave Adinich's estate. Paul presented a check to GARS for \$1,920 from the proceeds of this sale. The donation will be dedicated to our education fund
- Programs Update (Kevin K4GTR)
  - November: Steve Back will present on types of modulation in ham
  - December: Holiday party
  - January: Jack McElroy, who will discuss balloon launch and apps for tracking them
  - Call for additional programs/presenters for 2025
- Reminder of upcoming officer elections in February 2025
- Recap of upcoming events
  - Holiday Party 12/7
  - TechFest 1/11
  - Winter Field Day 1/25-1/26

### Workshop Minutes – November 19, 2024

**Number in Attendance:** 9 **Workshop Topic:** General Discussion of Up Coming Events

**Presenter:** Dallas N4DDM

**Brief Summary:** We didn't have any follow-up discussion of Steve Back's Modulation Presentation, so we discussed upcoming GARS events.

- For Walt's antenna installation; we need a small crew of 3-5 helpers to raise his vertical above the roof's peak. We need a few more helpers to raise the tilt-up mast.
- Holiday Party; We need a few setup/teardown volunteers, Dallas is to email out invites and reminders that the last day to sign up is November 29th.
- TechFest; Setup Volunteers Friday 12-5 PM.

Elmers are always present at the GARS Workshops. Feel free to bring your questions to the Workshop and if your project is small enough to get to the meeting, let us know in advance via email so we can have tools, test gear, etc.



## Events – GARS and others

### ARRL CONTESTING INFO

From ARRL Contest Calendar

> For more information click the links <

2024 January

1 [Straight Key Night](#)

6 [Kid's Day](#)

6-7 [RTTY Roundup](#)

20-22 [January VHF Contest](#)

February

12-16 [School Club Roundup](#)

17-18 [International DX – CW](#)

March

2-3 [DX Contest -- SSB](#)

April

21 [Rookie Roundup – Phone](#)

May

No planned contests

June

1-2 International Digital Contest

8-10 [June VHF](#)

15 [Kid's Day](#)

22-23 [Field Day](#)

July

13-14 [IARU HF World Championship](#)

August

3-4 [222 MHz and Up Dis Contest](#)

17-18 [10 GHz & Up – Round 1](#)

18 [Rookie Roundup – RTTY](#)

24-25 [EME - 2.3 GHz & Up](#)

September

14-16 [September VHF](#)

21-22 [EME - 2.3 GHz & Up – Rnd 2](#)

21-22 [10 GHz & Up – Wknd 1](#)

October

19-20 [EME - 50 to 1296 MHz](#)

21-25 [School Club Roundup](#)

November

2-4 [Nov. Sweepstakes - CW](#)

16-17 [EME - 50 to 1296 MHz](#)

16-18 [Nov. Sweepstakes - Phone](#)

29-30 [CQ World Wide DX - CW](#)

December

6-8 [160 Meter](#)

14-15 [10 Meter](#)

22 [Rookie Roundup-CW](#)

For more information:

<http://www.arrl.org/contest-calendar>

### HAMFEST CALENDAR

[Please confirm the status of a Hamfest before making plans to attend]

12/13/2024 - 12/14/2024

[Tampa Bay Hamfest, ARRL West Central Florida Section Convention](#)

Location: Plant City, FL

Type: ARRL Convention

Sponsor: Florida Gulf Coast Amateur Radio Council

Website: <http://www.fgcarc.org/>

01/04/2025 - [BCARC Annual Freezefest](#)

Location: Locust Fork, AL

Type: ARRL Hamfest

Sponsor: Blount County Amateur Radio Club

Website: <http://www.w4blt.org>

01/11/2025 - [GARS TechFest](#)

Location: Gwinnett County Fairgrounds, GA

Type: Technical Fest

Sponsor: Gwinnett Amateur Radio Society

Website: <http://www.GARS.org>

01/10/2025 - 01/11/2025

[2025 Southwest Florida Regional Hamfest, ARRL Southern Florida Section Convention](#)

Location: Fort Myers, FL

Type: ARRL Convention

Sponsor: Fort Myers Amateur Radio Club, Inc.

Website: <http://swflhamfest.info>

02/07/2025 - 02/09/2025

[Orlando HamCation, Southeastern Division Convention](#)

Location: Orlando, FL

Type: ARRL Convention

Sponsor: Orlando Amateur Radio Club

Website: <http://www.hamcation.com>

02/15/2025 - [Highlands County Amateur Radio Club Hamfest](#)

Location: Sebring, FL

Type: ARRL Hamfest

Sponsor: Highlands County Amateur Radio Club

Website: <http://w4dgh.org/meet>

04/05/2025 - [Daleville Area Hamfest](#)

Location: Daleville , AL

Type: ARRL Hamfest

Sponsor: Daleville Area Amateur Radio Service

Website: <https://daleville.us/daleville-area-hamfest>

04/12/2025 - [TarcFest](#)

Location: Tampa, FL

Type: ARRL Hamfest

Sponsor: Tampa Amateur Radio Coub

Website: <http://www.hamclub.org>

For more information: [www.arrl.org/hamfests-and-conventions-calendar](http://www.arrl.org/hamfests-and-conventions-calendar)

When searching by division, remember some states adjacent to GA are in different divisions: Southeastern: GA, AL, FL Delta: TN Roanoke: NC, SC



GARS Events Calendar for 2024		GARS Recurring Calendar	
TechFest Winter Field Day Dog Show Fundraiser Spring Technician HamCram <a href="#">Georgia QSO Party</a> North metro area Fox Hunt <a href="#">Memorial Day Parade</a> <a href="#">ARC/KARC Hamfest</a> <a href="#">Field Day</a> Summer General HamCram Fall Technician HamCram <a href="#">JOTA</a> <a href="#">Stone Mt. Hamfest</a> Holiday Party	January 13 2024 January 27-28 2024 March 5-6 2024 March 23-24, 2024 April 13-14 2024 April 2024 May 27 2024 June 1 2024 June 22-23 2024 July 27-28, 2024 September 28-29 2024 October 2024 November 2-3 2024 December 7 2024	<ul style="list-style-type: none"><li>2nd Tuesday of the month at 7 pm (except December) Monthly Club Meeting 690 Airport Rd, Lawrenceville, GA 30046</li><li>3rd Tuesday of the month at 7 pm (except December) Monthly Workshop 690 Airport Rd, Lawrenceville, GA 30046</li><li>3rd Sunday of the Month at 2 pm <a href="#">GARS Ham Exam Session</a> 690 Airport Rd Lawrenceville, GA 30046</li><li>Every Monday at 7:30 pm: GARS Want, Swap, Sell, and Information Net on the GARS 147.075 MHz repeater</li><li>2<sup>nd</sup> and 4<sup>th</sup> Friday at 8:30 pm: GARS 440 Talk Net</li><li>Every Monday at 8:30 pm: ARES Training on the GARS 147.075 MHz repeater</li><li>Every Friday at 11:30 am, GARS Lunch at Chilli's</li><li>Every Saturday at 8:00 am GARS Breakfast at Cracker Barrel</li></ul>	

## GARS Calendar for December 2024

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2  7:30 – 8:00 PM 2M Net	3  7:00 PM Exec Meeting	4	5	6  11:30 AM Lunch at Chillies	7  8:00 AM Breakfast at Cracker Barrel  GARS Holiday Party
8	9  7:30 – 8:00 PM 2M Net	10	11	12	13  11:30 AM Lunch at Chillies  8:30 - 9:30 PM 70CM Talk Net	14  8:00 AM Breakfast at Cracker Barrel
15  2:00 PM GARS Ham Radio Exams, EAA 690 Hangar	16  7:30 – 8:00 PM 2M Net	17	18	19	20  11:30 AM Lunch at Chillies	21  8:00 AM Breakfast at Cracker Barrel
22	23  No 2M Net this week	24	25	26	27  11:30 AM Lunch at Chillies	28  8:00 AM Breakfast at Cracker Barrel
29	30  No 2M Net this week	31				



## Local Ham Radio Exams & Meetings

### GARS Ham Radio Exams

GARS Exam Sessions are held the 3<sup>rd</sup> Sunday of the month

Preregistration is REQUIRED

Doors open at 1:45pm, exams start promptly by 2:00pm

For more information and to preregister, please visit <https://qars.org/exams/>

GARS VE-Team  
VEC: W5YI-VEC  
EAA 690 Hangar  
690 Airport Rd  
Lawrenceville, GA 30046

GARS VE Team Leaders  
E-mail: [exams@gars.org](mailto:exams@gars.org).



### November 2024 Results

The GARS VE Team exam session results from November 2017<sup>th</sup>.

5 New Technicians:

- Alexander Collins - KQ4YWP
- Jesse Haney - KQ4YTP
- Jeffery Jewell - KQ4YVQ
- Yeinn Oh - KQ4YWS
- Yein Yoon - KQ4YWR

Special thanks to the Volunteer Examiners who made this exam session possible:

W4DTR - David Bruse  
K4CQO - Bob Hoffmann  
AB4QQ - Russell Prevost  
KM4SWL - Richard Kitz  
NG4H - William Beguhn  
W4SHT - Lynn Hatker  
WS3V - William Rudd  
NV4Q - William Carmichael

Thanks & 73, Chuck McCord KK4TKJ (Co-CVE)

### Local Ham Radio Exams

In order to find an exam session near you, please visit [http://www.arrl.org/exam\\_sessions/](http://www.arrl.org/exam_sessions/). Contact the information in the listing for further information.



### Local Ham Radio Meetings

In order to find a local Ham Radio Club meeting near you, please visit <http://www.arrl.org/find-a-club>. Contact the club for meeting information.





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Ham Radio Outlet App available at:



**Dr. Erin Pickwick**  
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Business Card	\$50
1/4 page	\$125
1/2 page	\$150
Full page	\$200

For swap items, post and see items on GARS groups.io (<https://groups.io/g/GARS>).

**Ready to take your Ham Radio Exam?**

Go to <https://GARS.org/exams/> to learn more, and to register for an upcoming exam session.